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ABSTRACT

In a fuel cell comprising a tubular casing, an electrolyte layer received in the tubular casing, and a pair of gas diffusion electrodes interposing the electrolyte layer and defining a fuel gas passage and an oxidizing gas passage, respectively, each gas diffusion electrode is formed by stacking a plurality of layers of material therefor, for instance in the axial direction of the casing. Because the gas diffusion layers are formed layer by layer, components can be formed in highly fine patterns so that a highly compact tubular fuel cell can be achieved. Similarly, the dimensions of the various elements of the fuel cell can be controlled in a highly accurate manner. Also, the geometric arrangement can be changed at will in intermediate parts of each gas passage.